DEPARTMENT OF INFORMATION TECHNOLOGY

COURSE SYLLABUS 2nd Semester AY2022-2023

Course Code:	ITEC70	**Course Title:**	Data Structure	**Type:**	Lecture	**Credit Units:**	3 UNITS

Course Description	khfiqhfi

Pre-requisites:	N/A	**Course Sched Laboratory / Lecture:**	11:00 AM - 12:00 PM AM WED / 7:00 AM - 12:00 PM FRI

Core Values	Students are expected to live by and stand for the following University tenets: TRUTH is demonstrated by the student's objectivity and honesty during examinations, class activities and in the development of projects. EXCELLENCE is exhibited by the students' self-confidence, punctuality, diligence and commitment in the assigned tasks, class performance and other course requirements. SERVICE is manifested by the students' respect, rapport, fairness and cooperation in dealing with their peers and members of the community. In addition, they should exhibit love and respect for nature and support for the cause of humanity.
Goals of the College / Campus	Imus Campus shall endeavor to achieve the following goals: 1. provide a general education program that will promote national identity, cultural consciousness, moral integrity and spiritual vigor; 2. train the nation's manpower in the skills required by the national development; 3. develop professions that will provide leadership for the nation; an advance knowledge through research work and apply new knowledge for improving the quality of human life; 4. respond effectively to changing societal needs and conditions;

Objectives of the Department	The Department of Information Technology shall endeavor to: 1. produce skilled professionals; 2. produce globally competitive and morally upright individuals; 3. give students advance knowledge through a research work and respond effectively to changing societal needs and conditions; 4. promote leadership, development and apply IT skills for the improvement of the quality of life; and 5. provide students both local and international careers not only in the IT industry but in various field such as medicine, arts, entertainment, engineering, communication, and a lot more.

Program Educational Objectives (based on the program CMO)

The BSINFOTECH program aims to produce graduate who can:

1.apply knowledge of utilization of both hardware and software technologies involving planning, installing, customizing, operating, managing and administering, and maintaining information technology infrastructure that provide computing solutions to address the needs of an organization;
2. conduct relevant researches and extension program activities in the field of information technology;
3. promote the development and transfer of appropriate information technology;
4. promote environmental preservation and protection on projects and enterprises related to information technology; and
5. become morally upright IT professionals with primary and secondary job roles.

Program Educational Objectives (based on the program CMO)

Program/Student Outcomes (based on the program CMO)		**Program Educational Objectives (based on the program CMO)**				
The students should:		**1**	**2**	**3**	**4**	**5**
a.	apply knowledge of computing fundamentals, knowledge of a computing specialization, and mathematics, science and domain knowledge appropriate for computing specialization to the abstraction and conceptualization of computing models from defined problems and requirements.					

b.	identify, analyze, formulate, research literature, and solve complex computing problems and requirements reaching substantiated conclusions using fundamental principles of mathematics, computing science, and relevant domain disciplines.					
c.	an ability to apply mathematical foundations, algorithm principles and computer science theory in the modeling and design of computer-based systems in a way that demonstrate comprehension of the tradeoffs involved in design choice.					
d.	knowledge and understanding of information security issues in relation to design, development and use of information systems.					
e.	design and Evaluate solutions for complex computing problems, and design and evaluate systems, components, or processes that meet specified needs with appropriate consideration for public health and safety, cultural, societal, and environmental consideration.					
f.	create select, adapt, and apply appropriate techniques, resources and modern computing tools to complex computing activities, with an understanding of the limitations to accomplish a common goal.					
g.	function effectively as an individual and as a member or leader in diverse teams and in multidisciplinary settings.					

h.	communicate effectively with the computing community and with the society at large about complex computing activities by being able to comprehend and write effective reports, design documentation, make effective presentations and give and understand clear instruction					
i.	an ability to recognize the legal, social, ethical and professional issues involved in the utilization of computer technology and be guided by the adaptation of appropriate professional, ethical and legal practices.					
j.	recognize the need, and have ability, to engage in independent learning for continual development as a computing professional.					

Course Outcomes and Relationship to Student Outcomes

Program Outcomes Addressed by the Course	**Program Outcomes Code**									
After completing this course, the students must be able to:	**a**	**b**	**c**	**d**	**e**	**f**	**g**	**h**	**i**	**j**
1. to equip the students with the technical skills needed in the industry.	I	I	I	I	I	I	I	I	I	I
2. to gain understanding about the concepts of the designs and implementations of system development	I	I	I	I	I	I	I	I	I	I
3. expose the students in common work practice.	I	I	I	I	I	I	I	I	I	I
4. apply all knowledge gain in terms of analysis and development.	I	I	I	I	I	I	I	I	I	I
5. select appropriate media for a multimedia application	I	I	I	I	I	I	I	I	I	I
6. understand essential concepts that influence authoring multimedia applications.	I	I	I	I	I	I	I	I	I	I

*Level: I-Introductory E- Enabling D-Demonstrative

COURSE AVERAGE							
Week No.	**Intended Learning Outcomes (ILO)**	**Topic**	**Teaching and Learning Activities (TLA)**	**Mode of Delivery**	**Resources Needed**	**Outcomes based Assessment (OBA)**	**Due Date of Submission of Output**
1							
2							
3-5							
6-8							
9	**MIDTERM EXAMINATION**						
10-12							
13-15							
16-17							
9	**FINAL EXAMINATION**						

COURSE REQUIREMENTS

Suggested Lecture Requirements:

1. Mid-Term Examination
2. Final Examination
3. Quizzes/Seat works/Recitations
4. Video presentation
5. Fact Sheet
6. Class Reporting/Reaction Paper
7. Assignments
8. Class or Group Project (Term Paper/Project Design/Case Study/Feasibility Study/Culminating Activity/Portfolio)
9. Class Attendance

Suggested Laboratory Requirements:

1. Laboratory Reports
2. Individual Performance
3. Quizzes
4. Mid-Term Examination
5. Final Examination
6. Video presentation
7. Fact Sheet
8. Attendance

*All exams must follow a Table of Specifications (TOS) and Rubrics for evaluation of student performance or projects.

GRADING SYSTEM

A. Grading system for 2 units lecture and 1 unit laboratory (i.e. DCIT 21; 3 units; Lec - 2 hrs & Lab - 3 hrs)
Lecture – 60%
Laboratory – 40%

B. Grading system for 1 unit lecture and 2 units laboratory (i.e. DCIT 22; 3 units; Lec -1 hr & Lab - 6 hrs)
Lecture – 40%
Laboratory – 60%

C. Grading system for 2 units lecture and 3 units laboratory (i.e. ELEX 50; 5 units; Lec – 2 hrs & Lab – 9 hrs)
Lecture – 30%
Laboratory – 70%

CLASS POLICIES

A. Attendance
B. Classroom Decorum
C. Examination/ Evaluation

REFERENCES & SUPPLEMENTARY READINGS

A. Laboratory Manual (if with laboratory)
B. Reference Books
C. Electronic References(E-books/Websites)

REVISION HISTORY

Revision Number	Date of Revision	Date of Implementation	Highlights of Revision
		2nd Semester AY2022-2023	

Prepared by:	Evaluated by:	Approved by:	
Gizelle Rodero Instructor 1 09052826373 juand@gmail.com Department of Information Technology Consultation Schedule: Mon 6:00 -7:00 pm Tue 6:00 -7:00 pm Date Prepared:	**Ricky Tepora** Chairperson Department of Information Technology rickytepora@gmail.com Date Evaluated: **2023-02-07** Actual signature: _____	**MARLON A. MOJICA, PhD** Campus Administrator Imus Campus Date Approved: Actual signature: _____	